

REMARKS

Claims 1, 3, 5, 6, 7, 8, 9, 10, and 12 are pending. Please reconsider this application in view of the above amendments and the following remarks.

Amendment to Claim 1

Claim 1 was amended to select “a polymerizable compound” from an “oxetane compound.” Furthermore, claim 1 was amended so as to include the limitation of Claim 13. The correction to use “mPa·s” is supported by the description at page 42, lines 9-12. The currently amended Claim 1 has a corrected viscosity unit.

Rejection of claims

- (I) The Declaration filed on May 6, 2005 was considered to be insufficient to overcome the Rejection of Claims 1-3, 5-10 and 12-13. The reasons of this decision are:
- (a) The Declaration using Ink Composition 1 does not reasonably provide unexpected results for the different composition claimed in the instant claim.
 - (b) It is obvious to use smaller particle size to prevent nozzle clogging.
- (II) Claims 1-3, 6-10 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiwara et al. (US 6,166,100) in view of Shimizu et al. (US 4,680,058).
- (III) Claims 1-2, 5-6, 8-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 6,783,840) in view of Shimizu et al. (US 4,680,058).

Arguments

- (I) Claim 1 was amended so as to limit a polymerizable compound to oxetane compounds. As a result, Applicant believes that the previous Declaration using Ink Composition 1 is sufficient to provide unexpected results of the present invention.
- (II) **Hiwara (US 6,166,100)**

The Inks disclosed in Hiwara are used for coating on a substrate (see Col. 1, lines 34-44). Hiwara does not teach or suggest controlling the value of the viscosity of

the ink within the range of amended claim 1. Moreover, the viscosity of Example 3 and Example 9 are more than 500 mPa·s at 40°C as is demonstrated by the newly conducted experiment by Mr. Satoshi Masumi (Declaration co-filed herewith). These values are too high compared with the value of the amended claim 1: 7 to 30 mPa·s at 40°C. They could not be applied to ink-jet recording. There is no teaching or suggestion to apply the inks of Hiwara to ink-jet recording by modifying the viscosity within the range of the amended claim 1.

(III) Watanabe (US 6,783,840)

The ink of Watanabe is related to “a resist ink” for “printed circuit board” (see Col. 1, lines 11 on). Watanabe discloses example recording methods as: a screen printing method, a spray method, a roll coating method, an electrostatic coating method or a curtain coating method (Col. 11, lines 57-59). In Example of Watanabe, a resist ink was coated by a screen printing method (Col. 14, lines 9-10). From the above-descriptions, Watanabe does not disclose the application of his ink to ink-jet recording.

The viscosity of the ink of Watanabe was measured as disclosed in the declaration. As is described in the Declaration, it was more than 100 mPa·s at 40°C

The Examiner has taken the position that the present claims can be achieved by combining Watanabe and Shimizu. However, there is no teaching to modify the viscosity of the ink of Watanabe within the range of the amended claim 1.

(IV) Shimizu (US 4,680,058)

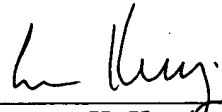
Shimizu discloses “White ink composition for ink-jet printing”. However, Shimizu does not teach or suggest including “a polymerizable compound selected from ... oxetane compound” in the ink.

By taking consideration of the above-described amendments and remarks, Applicant respectfully requests withdrawal of the rejections. Should the Examiner have any questions or concerns, the Examiner is invited to call the undersigned attorney of record.

Respectfully submitted,

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